

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/000780

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 F15B 15/24**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7 F15B, C, D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Kiponet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 04-34203A ( T V VALVE KK) 05.02.1992, SEE THE ABSTRACT & FIG15	1 ~ 4
A	JP 51-69768 A (AVE MACHINE KK) 16.06.1976, SEE THE ABSTRACT & FIG1 ~ FIG2	1 ~ 4
A	DE3329171A1 (SAMSON AG) 28.02.1985, SEE THE ABSTRACT & FIG	1 ~ 4
A	US 2002017190AA (SMC KK) 14.02.2002, SEE THE ABSTRACT & FIG1 ~ FIG3	1 ~ 4

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

15 JULY 2004 (15.07.2004)

Date of mailing of the international search report

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Name and mailing address of the ISA/KR



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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 04-34203A	05.02.1992	NONE	
JP 51-69768A	16.06.1976	NONE	
DE 3329171A1	28.02.1985	NONE	
US 2002017190AA	14.02.2002	US 6571681BB	03.06.2003
		DE 10137468A1	21.02.2002
		JP 2002048108A2	15.02.2002
		SE 200102647A	05.02.2002
		TW 503411B	23.07.2001
		CN 1337723A	27.02.2002